Supreme Court, U.S.
FILED

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No. ____

IN THE

Supreme Court of the United States

RICHARD SCHMIDT,
Petitioner,

v.

THE STATE OF LOUISIANA,
Respondent.

Petition for a Writ of Certiorari to the Louisiana Supreme Court

PETITION FOR A WRIT OF CERTIORARI

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QUESTION PRESENTED FOR REVIEW

I.

Whether, in a *criminal* prosecution, the admission of expert testimony regarding novel scientific evidence which is "shaky," or unreliable, because it has no "known or potential rate of error," and there are no "standards controlling the technique's operation," violates the due process clauses of the Fifth and Fourteenth Amendments to the Constitution.

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PETITION FOR A WRIT OF CERTIORARI

Petitioner Richard Schmidt respectfully requests that this Court issue a writ of certiorari to review the judgment of the Louisiana Supreme Court entered on September 28, 2001, to address the important question of federal law presented herein.

OPINIONS DELIVERED IN THE COURTS BELOW

The judgment of the Louisiana Supreme Court denying Richard Schmidt's petition for a writ of *certiorari* to the Louisiana Court of Appeal, Third Circuit, is not reported. A copy of that judgment is attached to this petition as Appendix A. The opinion of the Louisiana Court of Appeal, Third Circuit, dated July 26, 2000, affirming petitioner Richard Schmidt's conviction and sentence is reported as *State v. Schmidt*, 771 So.2d 131 (La.App.3 Cir.2000). A copy of this opinion is attached to this petition as Appendix B. The opinion of the Lousiana Court of Appeal, Third Circuit, dated July 29, 1997, affirming the district court's holding that expert testimony

regarding "viral DNA" evidence would be admissible at Schmidt's trial, is reported as *State v. Schmidt*, 699 So.2d 448 (La.App.3 Cir.1997). A copy of this opinion is attached to this petition as Appendix C. The opinion of the district court dated January 26, 1997, which held that expert testimony regarding viral DNA evidence would be admissible at Schmidt's trial is not reported. This opinion is attached to this petition as Appendix D.

STATEMENT OF THE GROUNDS ON WHICH THE JURISDICTION OF THE COURT IS INVOKED

The order of the Louisiana Supreme Court denying review of the judgment and opinion of the Louisiana Court of Appeals, Third Circuit, was issued on September 28, 2001. Consequently, this Court has jurisdiction under 28 U.S.C. § 1257. *See* Supreme Court Rule 13.1

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

The Fifth Amendment to the United States Constitution provides, in pertinent part:

> No person shall . . . . be deprived of life, liberty, or property without due process of law;

The Fourteenth Amendment to the United States Constitution provides, in pertinent part:

> . . . nor shall any State deprive any person of life, liberty, or property, without due process of law . . .

STATEMENT OF THE CASE

INTRODUCTION

In *United States v. Scheffer*, 523 U.S. 303, 309 (1998), this Court noted that "the exclusion of unreliable evidence is a principal objective of many evidentiary rules," citing Federal Rule of Evidence 702, and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993). Unfortunately, because *Daubert* does not *require* a district court to consider whether the novel scientific evidence being offered has a "known or potential error rate," and does not *require* the court to determine whether there exist "standards controlling the [scientific] technique's operation," the very real possibility exists that when novel scientific evidence is offered, it is little more than a random finding dressed up as scientific evidence. Moreover, a jury may be unable to fully evaluate such evidence, because its theoretical foundations are no longer a trial issue, the ruling on admissibility having already been made—outside its presence.

Schmidt submits that in *criminal* cases, due process, and its concomitant requirement that guilt be established beyond a reasonable doubt, preclude the use of "shaky" evidence *against* a defendant. Criminal convictions based on "shaky" evidence, even if it is "scientific," are an anathema to the Constitution. However, under *Daubert*, with its holding that *all* its factors are optional, such convictions are not just possible, they are inevitable.

Unquestionably, this Court's opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) was a turning point in the approach taken by courts to the admission of scientific evidence in judicial proceedings.[1] *All* courts, and *all* judicial proceedings—both federal and state. Because while the

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[1] Since it was handed down, *Daubert* has been cited in over 3,000 subsequent judicial opinions, both federal and state.

"question presented" in *Daubert* was limited to "the standard for admitting expert scientific testimony in a *federal trial*," *Daubert*, p.582, the reality is that the Federal Rules of Evidence have become *the* rules of evidence for many jurisdictions.[2] Perhaps the best illustration of that is the number of state jurisdictions that have chosen to adopt the *analysis* set forth in *Daubert*: thirty-three (33), at last count. Louisiana is among this group.

Daubert has two core holdings: first, that the *Frye*[3] test for the admissibility of scientific evidence was superseded by the adoption of the Federal Rules of Evidence, *Daubert*, p.587; and second, that Rule 702, operating in conjunction with Rules 104(a), 703, 706, and 403 of the Federal Rules of Evidence create the "inquiry" that a judge must conduct before deciding to admit novel scientific evidence. *Daubert*, pp.592-595. This inquiry was described as a "flexible" one, and this Court specifically held that "[m]any factors will bear on the inquiry, and we do not presume to set out a definitive checklist or test."

Most critical however, is the "optional" nature of each factor on the *Daubert* "checklist." As this Court emphasized in both *Daubert*, and *Kumho Tire Co., Ltd., v. Carmichael*, 526 U.S.137 (1999), the "checklist" is not a mandatory one—a court "*may* consider several more specific factors that *Daubert* said might "bear on" a judge's gate-keeping determination." *Kumho, supra*, p.150.

This Court acknowledged that the use of the checklist, without mandatory reference to a "general acceptance standard," could produce evidence that was "shaky." And when such

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[2] Forty-four (44) states, and the United States Military, have adopted the Federal Rules of Evidence, either as a whole, or in significant part. Jack B. Weinstein & Margaret A. Berger, *Weinstein's Federal Evidence*, Table of State and Military Adaptations of the Federal Rules of Evidence (Joseph M. McLauglin, ed., Matthew Bender 2d ed., 2001).

[3] *Frye v. United States*, 54 App. D.C. 46, 47, 293 F. 1013, 1014 (1923).

"shaky but admissible" evidence is offered in a *civil* case, it may well be that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof . . . [are an] appropriate means of attacking shaky but admissible evidence." *Daubert*, p. 596.

But what is true for civil cases is not necessary true for criminal cases. Moreover, the constitutional rights that protect criminal defendants have no parallel in civil proceedings.

This Court has considered the implications of *Daubert* in the context of a **criminal** proceeding only once—and then only to determine whether "shaky" or unreliable evidence could be offered *by* a defendant, in his *defense*. *See United States v. Scheffer*, 523 U.S. 303 (1998). Significantly, the Court excluded the use of such evidence *by* a defendant, even though its reliability rate may have been in the 85-90% range.

As will be shown below, when "shaky" evidence is used in a criminal case, *against* a defendant, that defendant's right to basic due process of law is offended. But unfortunately, that is precisely the type of scientific evidence that is being used against defendants in criminal proceedings throughout the United States—all under the rubric of Federal Rule of Evidence 702 and *Daubert*.

THE SPECIFIC FACTS OF THIS PROCEEDING

On July 23, 1996, Richard Schmidt, a prominent gastroenterologist in Lafayette, Louisiana, was indicted for the attempted second-degree murder of his mistress, Janice Trahan. The State of Louisiana alleged that Dr. Schmidt had attempted to murder Janice Trahan on August 4, 1994, by injecting her with the HIV virus. Although not alleged in the indictment, it was the State's theory of prosecution that Dr. Schmidt had obtained this virus from one of his patients, Donald McClelland, who was HIV positive, and then injected it into Janice Trahan.

Between the indictment and trial, the State informed Dr. Schmidt that it intended to offer "viral DNA" [4] evidence against him at trial, (through the testimony of an expert witness) in an attempt to prove that the HIV virus infecting Janice Trahan was the same virus as the one infecting Dr. Schmidt's patient. Specifically, the State represented that

> . . . the actual "DNA evidence" sought to be introduced by the state consists of testimony from Drs. Michael L. Metzker and Richard A. Gibbs regarding the epidemiology of the HIV-1 Virus contained within the victim, Janice Trahan, of Donald McClelland (a patient of the defendant), and thirty geographic local controls . . . Dr. Metzker utilized the recognized technique of polymerase chain reaction (PCR) upon the samples in question. . . . The state seeks to present, through the testimony of Drs. Metzker and Gibbs, the data generated mechanically from such testing.
>
> . . . Neither Drs. Metzker nor Gibbs will testify categorically that the HIV viruses within Janice Trahan and Donald McClelland are precisely the same. They will

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[4] Human DNA is non-mutating, and is usually analyzed using a methodology known as restriction fragment length plymorphism (RFLP). Viral DNA, particularly HIV DNA, mutates at a rapid rate. In this case, the viral DNA was analyzed as follows:

> The first step was . . . to obtain tissue samples from the individuals. The next step would be to extract DNA from thos tissue samples. The step after that would be to amplify using the polymerase chain reaction, the abbreviated PRC, specific sequences from the HIV genome from this DNA, from those DNA samples. After those had been amplified form the polymerase chain reaction—then they would be subjected to primary sequence analysis so that the actual base pairs from the DNA sequences, the specific target regions of the HIV would be sequenced. After the sequences were obtained, the sequences from the particular target individuals would be aligned; and then after the aligned sequences were obtained, they would be subjected to phylogenetic analysis, and then the phylogenetic analysis would be subjected to statistical testing.

> testify that the data generated by testing suggest that the HIV Isolates derived from Donald McClelland are close related to the HIV Isolates derived from Janice Trahan . . . [and will be] offered as simply one piece of many pieces of circumstantial evidence.

Such evidence had never before been offered in any judicial proceeding in the United States. Dr. Schmidt moved to exclude it, on the grounds that it did not meet the standards for the admissibility of scientific evidence established by *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).[5] Specifically, Schmidt contended that: (1) "the State [sought] to expand the realm of DNA testing, which normally consists of profiling and Restriction Fragment Length Polymorphism ('RFLP') analysis of human genes that are virtually identical and constant, to comparison of HIV DNA sequences that are inherently non-identical and inconstant . . . . and that the use of non-identical DNA in such a manner . . . **is unreliable** and is subject, in large part, to experimental and investigatory bias;" (2) that the "tests such as those relied upon by the State are based upon methodologies that are not sufficiently developed or universally agreed upon in the scientific community;" and (3) "that the analysis performed by the State's Expert, as evidenced in the State's Report, **is unreliable**, not probative as to the source of J[anice] T[rahan]'s HIV and is highly prejudicial to the defendant" (emphasis added).

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[5] In *State v. Foret*, 628 So.2d 1116 (La.1993), the Louisiana Supreme Court explicitly adopted the standards of *Daubert*, for use in interpreting La.Code Evid.Art. 702, which was identical to the pre-December 1, 2000 version of F.R.E. 702. Although Federal Rule 702 "has been amended in response to *Daubert*, " (Advisory Committee Notes, 2000 Amendments), La.Code Evid. Art. 702 has not.

An evidentiary hearing was held in the district court. Following two days of testimony, the court found that viral DNA evidence evidence was admissible:

> The state has the burden of showing that the underlying principle of analyzing HIV DNA is valid, and that the methodology and techniques employed are reliable. The state must show that the mtheods used in this case are (1) susceptible of empirical testing; (2) have been subjected to peer review and publication; (3) have an acceptably low rate of error; and (4) are generally accepted in the scientific community. The court finds that the state has met this burden.
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> * * *
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> **The court need not decide whether the methodology used by the state's experts is valid or reliable to show *direct transmission*** of HIV from one person to another, since the state does not intend to use if for that purpose. No reference by the state's expert witnesses to any likelihood or suggestion of direct transmission will be allowed at the trial.
>
> * * *
>
> With sufficient safeguards, such as stringent precautions by the state to refrain from any reference to direct transmission, testimony by defense experts, and carefully drafted jury instructions, the court has confidence that the jury will understand the circumstantial nature of the state's scientific evidence.

Appendix "D", pp. 99a-101a. (emphasis added)

However, as was established then, and at trial, the error rate of *phylogenetic analysis,* in terms of its ability to establish "relatedness," *i.e.,* **in terms of its ability to prove that for which it was being offered,** is *unknown.*

Dr. Schmidt sought *pre*-trial review from the district court's ruling, and in March, 1997, the Louisiana Court of Appeal, Third Circuit, agreed to hear oral argument on Schmidt's application for a supervisory writ. Following briefing, and oral argument, the Court of Appeal, Third Circuit, again relying on *Daubert*, affirmed the ruling of the district court finding expert scientific testimony regarding viral DNA evidence to be admissible. (Appendix "C", p. 72a). Although the Court of Appeal discussed the concept of the "error rate" of the phylogenetic analysis, it made no findings as to the degree of the error rate, or even whether the error rate was known. Schmidt then unsuccessfully petitioned the Louisiana Supreme Court for a writ of *certiorari*.

As might be expected, expert testimony from both State and defense witnesses regarding viral DNA testing became a focal point of Schmidt's trial.

Dr. William Gallaher and Dr. Bette Korber gave expert testimony on behalf of Schmidt. Dr. William Gallaher, a professor of microbiology, immunology, and parasitology at the Louisiana State University Medical Center, was offered by the defense, and accepted by the Court, and the State, as an expert in the field of microbiology and molecular genetics.[6]

According to Dr. Gallaher, because the rate of mutation for the HIV virus is only .5 to 1% per year the expected difference between the Janice Trahan sample and the Donald McClelland sample should only have been 1 to 2%—given that the two viral strains were alleged to have come from a common source only 13 months earlier. Dr. Gallaher found that with regard to the two samples, "[t]he regular minimum [difference] is 4%. The average is 7%, and the maximum is 10½%".

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[6] Dr. Gallaher received a Ph.D from Harvard in microbiology and molecular genetics, and was responsible for discovering the means by which the HIV virus enters the body at the cellular level.

Dr. Bette Korber was also called by the defense as an expert witness.[7] Dr. Korber was offered and accepted as an expert in molecular epidemiology and phylogenetic analysis. According to Dr. Korber, the risk factors for Trahan should have been identified, and taken into consideration when the "control group" was selected for the State's analysis, because "many studies that have shown that you can have different clusters of viruses, different groups of viruses, in different risk groups . . . .". Consequently, choosing a group that was very different from Trahan, as was done in this case, could easily have distorted the results, *i.e.*, the State's experts' finding of "relatedness". Like Dr. Gallaher, Dr. Korber found that there was an average 7% variation in the viral DNA sequences of the Donald McClelland and Janice Trahan samples. What would be expected would be a maximum variation of 3%. In Dr. Korber's words:

> . . . this percent here, this distance between JT and DM, which is the distance that averages to about 7% that we discussed before, it's too long. I don't see that kind of a distance typically in transmission cases. * * * This is really atypical for direct transmission.

In addition, Dr. Korber testified that

> all of the sequences, the viral sequences from JT, are completely distinct from all of the viral sequences from DM.

At trial Dr. Korber gave several examples of instances in which the "bootstrap values" (*i.e.*, the statistical findings upon which the State's experts based their conclusions of

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[7] Dr. Korber is the principal investigator at the Los Alamos HIV Data Base, and is on the visiting faculty at the Santa Fe Institute, which studies HIV DNA and related issues. Dr. Korber received her Ph.D in chemistry from the California Institute of Technology in 1987, and then studied molecular epidemiology at the Harvard School of Public Health. Dr. Korber is also a consultant to the United Nations on HIV and AIDS issues.

"relatedness") of HIV DNA pairs known to be *unrelated* were closer phylogenetically (and actually had bootstrap values of 100%) than the samples taken from Trahan and McClelland. What this demonstrated is the inability of *phylogenetic* analysis to distinguish between closely related pairs, and unrelated pairs on a phylogenetic tree. In short, the exceptions disproved the rule, and made the entire analysis scientifically suspect. More critical, however, was that the error rate of phylogenetic analysis, *i.e.*, the rate at which it will show "relatedness' between unrelated HIV DNA pairs was and is completely unknown. In other words, the scientific foundation for the entirety of the state's "scientific" evidence was "shaky."

In concluding her testimony at trial, Dr. Korber testified that the 7% difference between the virus in Trahan and the virus in McClelland was in fact ***more consistent with an alternative source of infection for Trahan than for direct transmission (via a shot from Dr. Schmidt).***

The defense evidence notwithstanding, Schmidt was found guilty as charged in October, 1998, and in February, 1999, he was sentenced to fifty (50) years imprisonment.

Schmidt appealed his conviction and sentence to the Louisiana Court of Appeals, Third Circuit, raising seven (7) issues, including the issue of whether the expert testimony regard viral DNA satisfied the requirements and standards of *Daubert*. In this appeal, he again argued that it was error for the district court to permit the introduction of the viral DNA evidence. The Court of Appeals rejected Schmidt's arguments:

> * * * The issue of admissibility [of expert testimony regarding viral DNA] came before this court in a pretrial writ application and, after briefing and oral arguments from counsel, this court issued an opinion in *Schmidt*, 699 So.2d 448. In the writ opinion, we determined that the methodology used by Dr. Metzker in his investigation satisfied the standards of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786

(1993); *State v. Foret*, 628 So.2d 1116 (La.1993), and *State v. Quatrevingt*, 93-1644 (La.2/28/96); 670 So.2d 197, *cert. denied*, 519 U.S. 927, 117 S.Ct. 294 (1996).

Significantly, the Court of Appeals found that even if the DNA evidence offered was **unreliable**, because the its theoretical foundations lacked scientific validity, it would not be considered prejudicial:

> On the question of admissibility of the Metzker study, we find that there is no merit to Defendant's arguments that the trial court erred in admitting that evidence. In essence, what Defendant is attacking is the persuasiveness or weight of the experts' testimony, a decision which is left to the trier of fact.
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> * * *
>
> Although we found that the phylogenetic analysis of the DNA of the HIV of D.M. and Trahan was admissible, whether or not this evidence proved that the HIV of D.M. was closely related to the HIV of Trahan is a question that goes to the weight of the evidence presented. It is improper for a reviewing court to reweigh that evidence. Rather, an appellate court determines whether that evidence, together with all other evidence, was sufficient for the jury to reasonably conclude that a defendant was guilty of the crime for which he was convicted.
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> * * *
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> * * * **Accordingly, even when unreliable DNA evidence is admitted at trial, we will not presume that such evidence is prejudicial to the defendant.**
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> * * *

Schmidt's petition for rehearing *en banc* in the Court of Appeals was denied, as was his subsequent application to the Louisiana for a writ of *certiorari* or review. He now seeks relief in this Court.

REASONS FOR GRANTING THE WRIT

I. THE COURTS OF THE STATE OF LOUISIANA HAVE DECIDED AN IMPORTANT QUESTION OF FEDERAL LAW THAT HAS NOT BEEN, BUT SHOULD BE, SETTLED BY THIS COURT.

In its opinion in *Daubert*, this Court concluded by "briefly addressing what appear to be two underlying concerns of the parties and *amici* in this case." *Daubert*, p.595. The first such concern was that "abandonment of 'general acceptance' as the exclusive requirement for admission will result in a 'free-for-all" in which befuddled juries are confounded by absurd and irrational pseudoscientific assertions."

The Court answered this concern as follows:

> In this regard respondent seems to us to be overly pessimistic about the capabilities of the jury and of the adversary system generally. Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence. See *Rock v. Arkansas*, 483 U.S. 44, 61, 107 S.Ct. 2704, 2714, 97 L.Ed.2d 37 (1987). Additionally, in the event the trial court concludes that the scintilla of evidence presented supporting a position is insufficient to allow a reasonable juror to conclud that the position more likely than not is true, the court remains free to direct a judgment, Fed. Rule Civ. Proc. 50(a), and likewise to grant summary judgment, Fed. Rule Civl. Proc. 56. Cf., *e.g.*, *Turpin v. Merrell Dow Pharmaceuticals, Inc.*,959 F.2d 1349 (CA6)(holding that scientific evidence that provded foundation for expert testimony, viewed in the light most favorable to plaintiffs, was not sufficient to allow a jury to find it more probable than not that defendant caused plaintiff's injury), cert.denied, 506 U.S. 826, 113 S.Ct. 84, 121 L.Ed.2d 47 (1992); *Brock v. Merrell Dow Pharmaceuticals, Inc.*, 874 F.2d 307 (CA5 1989)(reversing judgment entered on jury verdict for plaintiffs because evidence regarding causation

> was insufficient), modified 884 F.2d 166 (CA5 1989), cert. denied, 494 U.S. 1046, 110 S.Ct. 1511, 108 L.Ed.2d 646 (1990); Green 680-681. These conventional devices, rather than wholesale exclusion under an uncompromising "general acceptance" test, are the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702.

Daubert, supra, p.596.

What is missing from this discussion is a determination of whether these "conventional devices" are sufficient in a criminal case, when the novel scientific evidence is indisputably "shaky," or when it is not even known whether the evidence is shaky, because the court admitting such evidence has paid no attention to the "known or potential error rate" of the evidence—because *Daubert* does not require it to.

As noted above, since handing down *Daubert*, this Court has has considered its holding in that case in the context of a criminal prosecution only once—and then to consider the admissibility of evidence offered *by* a defendant. Numerous lower courts have considered the use of such evidence *against* defendants, however, and what has come into existence is a body of law endorsing the "shaky but admissible" approach, even in criminal cases:

> The district court conducted a lengthy hearing on admissibility of the DNA evidence under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 592, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993), and held that any flaws in Dr. Deadman's application of an otherwise reliable methodology went to weight and credibility and not to admissibility. Most circuits that have spoken have agreed with this approach, *see, e.g., United States v. Johnson*, 56 F.3d 947, 952-53 (8th Cir.1995), relying on the view that "cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof" is the proper challenge to "shaky but admissible evidence." *Daubert*, 509 U.S. at 596, 113 S.Ct. 2786. The district

> court did not abuse its discretion in admitting the Deadman evidence. *United States v. Lowe*, 145 F.3d 45, 50-51 (1st Cir.), *cert. denied*, 525 U.S. 918, 119 S.Ct. 270, 142 L.Ed.2d 222 (1998).

United States v. Shea, 211 F.3d 658, 668 (1st Cir.2000).

See also: United States v. Dico, Inc., 266 F.3d 864, 872 (8th Cir.2001); *United States v. Barnette*, 211 F.3d 804, 816 (4th Cir.2000)—Psychopathy Checklist Revised admitted against defendant, even in the absence of evidence that the list had been standardized as to the black population, or as to the post-middle age population;*United States v. Jones*, 107 F.3d 1147, 1160 (6th Cir.1997)—expert testimony regarding handwriting analysis admitted, even in complete absence of evidence regarding the reliability of such testimony; and *United States v. Chischilly*, 30 F.3d 1144, 1152 (9th Cir.1994)—admission of DNA evidence even though the reliability of the statistical procedure used was not generally accepted by the scientific community, and the small population at issue invalidated the statistical procedure used.

The "net result" of the "shaky but admissible" approach in criminal cases has been the admission of plainly *unscientific* evidence:

> Regrettably, in a large number of jurisdictions, post-*Daubert* courts are circumventing any rigorous analysis in order to continue to admit expert testimony that is shockingly unscientific. (footnote omitted) Not infrequently, convictions have been based on evidence for which the scientific foundation is highly suspect. (footnote omitted) Continued admissibility in some jurisdictions of bitemark analysis, voiceprint evidence, and handwriting analysis can be accounted for only in this way, because there is virtually no empirical data on error rates for this kind of evidence, and what there is suggest that the so-

> called experts are wrong as often as they are right. (footnote omitted).[8]

To this list can now be added the phylogenetic analysis of HIV DNA.

In criminal cases, the reliability of a guilty verdict is a direct function of the standard of proof. The higher the state's burden of proof, the more likely it is that any guilty verdict is a "correct" verdict. However, when the state is allowed to use novel scientific evidence that may, or may not be *reliable*, the constitutional requirement that a defendant's guilt be established by proof beyond a reasonable doubt is completely undermined—because such evidence cannot produce such proof.

Just over thirty years ago, this Court decided *In re Winship*, 397 U.S. 358 (1970). In that case, the Court wrote:

> Lest there remain any doubt about the constitutional stature of the reasonable-doubt standard, we explicitly hold that the Due Process Clause protects the accused against conviction except upon proof beyond a reasonable doubt of every **fact** necessary to constitute the crime with which he is charged.

In re Winship, supra, p.364 (emphasis added).

When any one of those "facts" is a fact produced by an unreliable scientific methodology, the protections of the Due Process Clause evaporate. District courts, when confronted with novel scientific evidence, must be required to make findings regarding the regarding the "known or potential rate of error" of the evidence, and the "standards controlling the technique's operation." This Court should grant *certiorari* to consider this important federal question.

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[8] Beecher-Monas, Erica, *Blinded by Science: How Judges Avoid the Science in Scientific Evidence*, 71 Temp.L.Rev. 55, 66 (Spring, 1998).

II. THE COURTS OF THE STATE OF LOUISIANA HAVE DECIDED AN IMPORTANT QUESTION OF FEDERAL LAW IN A WAY THAT CONFLICTS WITH A DECISION OF A UNITED STATES COURT OF APPEALS.

As was argued above, the "reliability" of novel scientific evidence, as manifested through its known error rate, and the standards controlling the technique used to produce it, must be the linchpin of its admissibility—particularly in a criminal case. At least one federal circuit has recognized this fact, and has made some of the *Daubert* factors mandatory:

> We believe that the reliability inquiry set forth in *Daubert* mandates that there be a preliminary showing that the expert properly performed a reliable methodology in arriving at his opinion. The *Daubert* Court stated that "under the Rules, the trial judge must ensure that any and all scientific *testimony* or *evidence* admitted is not only relevant, but reliable." ___U.S. at ___, 113 S.Ct. At 2795. This suggests that the inquiry extends beyond simply the reliability of the principles or methodologies in the abstract. In order to determine whether scientific *testimony* is reliable, the court must conclude that the testimony was derived from the application of a reliable methodology or principle in the particular case.

United States v. *Martinez*, 3 F.3d 1191, 1198 (8th Cir.1993).

This Court should grant *certiorari* as a way of bringing uniformity to this aspect of the law.

CONCLUSION

Wherefore, the foregoing reasons considered, this Court is respectfully urged to grant Richard Schmidt's petition for a writ of *certiorari*.

New Orleans, Louisiana, this 21st day of December, 2001.

Respectfully submitted,

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